

## Domestic production of agricultural biogas

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## Act of February 20, 2015 on renewable energy sources

(Journal of Laws of 2023, item 1436, as amended)

## Act of July 13, 2023

on facilitating the preparation and implementation of investments in the field of agricultural biogas plants, as well as their operation (Journal of Laws, item 1597)

> Act of April 10, 1997 Energy Law

(Journal of Laws of 2022, item 1385, as amended)



## Definition of biogas, agricultural biogas and biomethane

Article 2 point 1 of the Act on Renewable Energy Sources

**Biogas** – gas obtained from biomass, particularly from animal or plant waste processing installations, sewage treatment plants and waste landfills.

#### Article 2 point 2 of the Act on Renewable Energy Sources

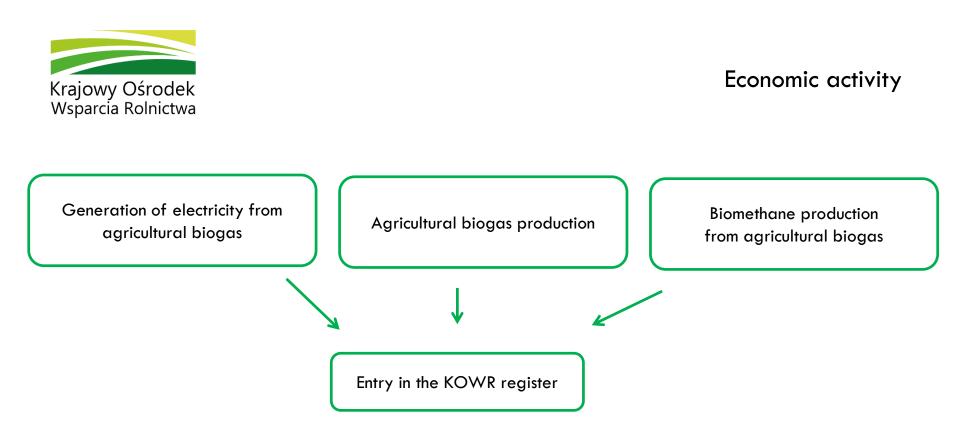
Agricultural biogas – gas obtained in the methane fermentation process:

- a) agricultural products and agricultural by-products, including animal excrement,
- b) products from the processing of products of agricultural origin and by-products, waste or residues from this processing, including food processing and production, originating from industrial plants, as well as from on-site wastewater treatment plants from agri-food processing, where industrial wastewater is separated from other types of sludge and sewage,
- c) food products that are expired or unsuitable for consumption,
- d) fats and oil mixtures from oil/water separation containing only edible oils and fats,
- e) plant biomass collected from areas other than those registered as agricultural,
- f) animal excrement obtained from non-agricultural activities,

- excluding biogas obtained from municipal waste, from landfills, as well as from substrates from sewage treatment plants other than those mentioned in point (a). b.

#### Article 2 point 3c) of the Act on Renewable Energy Sources

**Biomethane** – gas obtained from biogas, <u>agricultural biogas</u> or renewable hydrogen, subjected to a purification process, introduced into the gas network or transported in compressed or liquefied form by means of transport other than gas networks, or used to refuel motor vehicles without the need to transport it.



Entrepreneurs who meet the following conditions may apply for entry into the register:

- have a document confirming the legal title to the buildings in which agricultural biogas business activities will be carried out,
- they have appropriate facilities and installations, including technical devices, meeting the requirements specified in particular in fire protection regulations, sanitary regulations and environmental protection regulations, enabling the performance of this activity, as well as documents confirming the fulfilment of this obligation,
- are not in arrears with the payment of taxes, fees and social security contributions.



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## Entry in the register

- declaration of no arrears in payment of taxes, fees and social security contributions,
- a declaration that the data contained in the application are complete and true and that the entrepreneur knows and meets the conditions for conducting the activity covered by entry in the register,
- proof of payment of the stamp duty for performing an official act involving entry in the register of regulated activities (PLN 616).
- The General Director of KOWR enters the manufacturer into the above-mentioned register within 7 days from the date of receipt of a correct application together with declarations,
- 2. The register of agricultural biogas producers is public

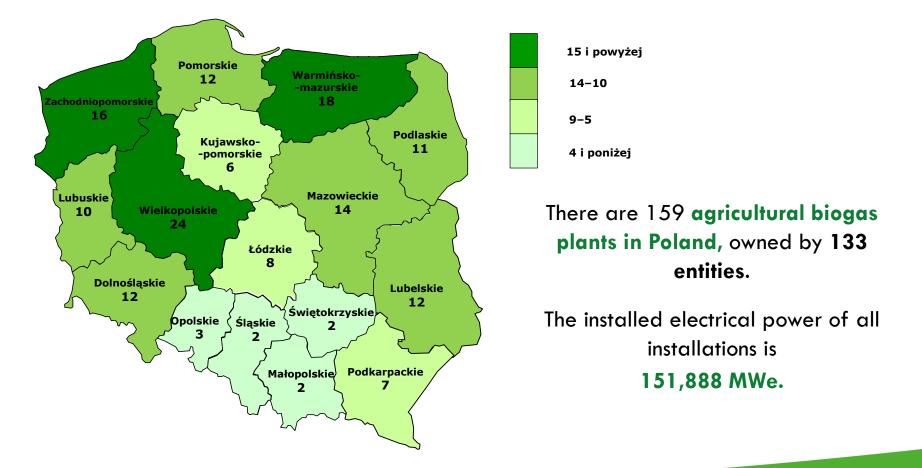
and is kept in electronic form by the General Director of KOWR.

KOWR has launched a new function on **the erolnik.gov.pl portal.** It allows you **to submit applications** for entry into the register of agricultural biogas producers or to update these applications **in electronic form**. The new function on the erolnik.gov.pl portal is available at the link: <u>https://erolnik.gov.pl/#/biogaz.</u>



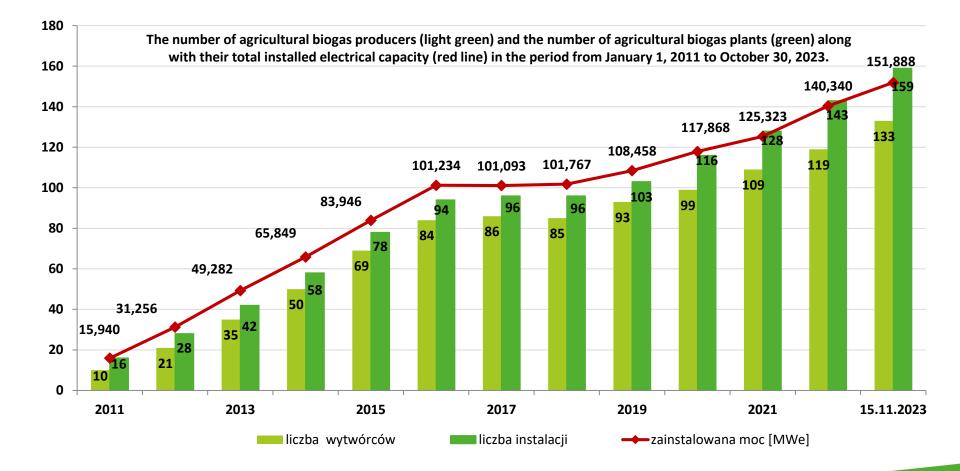
## Agricultural biogas plants in Poland

Rozmieszczenie terytorialne biogazowni rolniczych wg stanu na 15 listopada 2023 r.



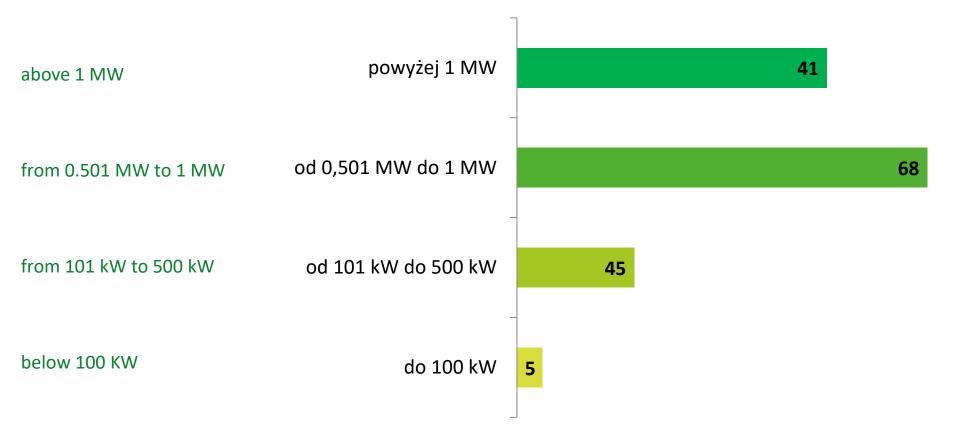
## Register of agricultural biogas producers







The number of agricultural biogas plants divided into the total installed electrical power of the system





After obtaining entry in the register, manufacturers are obliged to:

- using only raw materials listed in the definition of agricultural biogas for the production of agricultural biogas (Article 2 point 2 of the RES Act),
- only agricultural biogas to produce biomethane from agricultural biogas,
- keeping documentation regarding:
- a) the quantity and type of all substrates used to produce agricultural biogas; however, in the case of using waste originating from on-site wastewater treatment plants from agrifood processing, where industrial wastewater is separated from other types of sludge and sewage, the waste code is indicated in this documentation together with an additional marking that confirms, in accordance with the regulations issued pursuant to Art. 4 section 3 of the Act of December 14, 2012 on waste, that this waste comes exclusively from the processing of products from agriculture, horticulture, hydroponic cultivation, fishing, forestry or hunting,



b) the amount of agricultural biogas produced, specifying the amount of agricultural biogas:

- used to generate electricity,
- used to produce biomethane,
- sold,
- used in another way,
- c) the amount of electricity produced from agricultural biogas, specifying the amount of electricity:
- sold to the seller referred to in Article 40 section 1, or to another recipient,
- used for the production of agricultural biogas,
- used in another way,





d) biomethane produced from agricultural biogas, specifying the amount of biomethane:

- introduced into the gas network,
- transported in compressed or liquefied form by means of transport other than gas networks,
- used to refuel motor vehicles without the need to transport them,
- sold in order to use it to fulfil the obligation referred to in Article 23 section 1 of the Act on biocomponents and liquid biofuels, along with an indication of the share of raw materials listed in Annex 1, Part A to this Act, used for its production,

e) the amount of by-product resulting from the production of agricultural biogas,

f) the amount of purchased agricultural biogas and details of the entity from which the agricultural biogas was purchased;



- having documentation confirming the date of generating electricity from agricultural biogas for the first time, or producing agricultural biogas for the first time, or producing biomethane from agricultural biogas for the first time in a given installation of a renewable energy source or the date of their production for the first time after the completion of the modernization of this installation and the date completing the modernization of this installation,
- submitting quarterly reports to the Director General of KOWR within 45 days after the end of the quarter,
- informing the Director General of KOWR about any change in the data contained in this register, in particular about the termination or suspension of business activity, within 14 days from the date of change of these data.

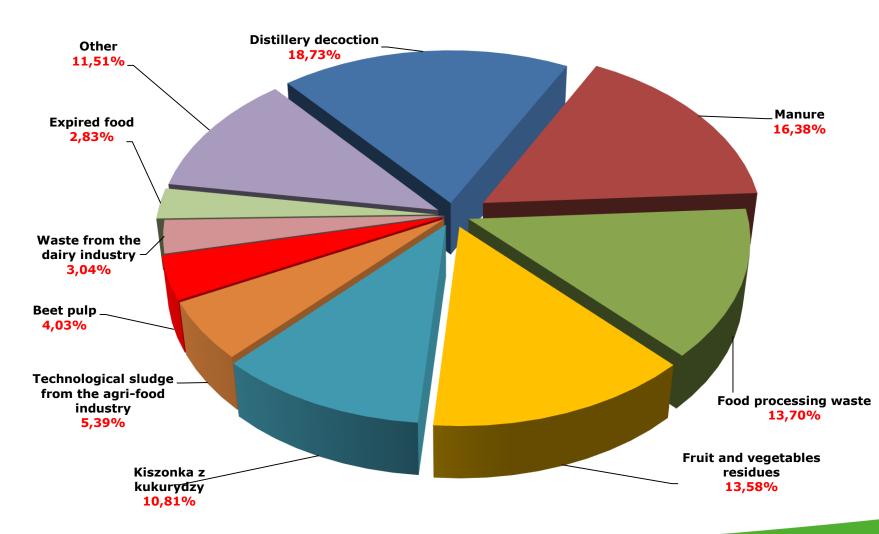


## The amount of raw materials used to produce agricultural biogas in 2022 as of November 15, 2023

No	Raw Materia	als	Total Q1 - Q4 2022
1.	Distillery		1 068 753,900
2.	Slurry	88% - waste	934 770,175
3.	Food processing waste	12% - crops for	782 040,448
4.	Fruit and vegetable residues	biomass production	774 823,445
5.	Corn silage		616 779,403
6.	Technological sludge from the agri-food indus	try	307 398,451
7.	Beet pulp		229 875,868
8.	Waste from the dairy industry		173 731,266
9.	Expired food		161 947,113
10.	Other		656 737,760
		Suma	5 706 857,829

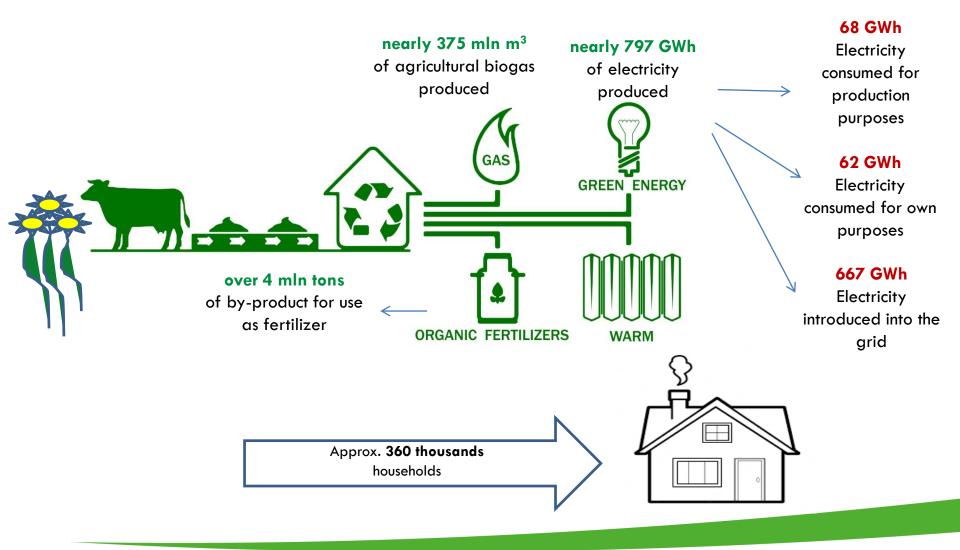


List of raw materials used to produce agricultural biogas in 2022 as of November 15, 2023.





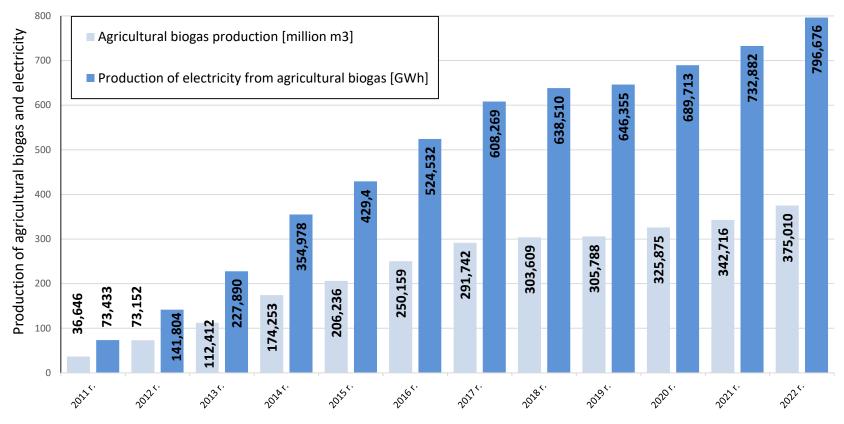
## Production data of agricultural biogas plants in 2022 as of November 15, 2023





### Production data of agricultural biogas producers as of November 15, 2023

#### Production of agricultural biogas and electricity in 2011 - 2022





The General Director of KOWR has the powers to:

- 1. imposing financial penalties (PLN 1,000 or PLN 10,000) by way of an administrative decision,
- 2. monitoring the amounts and types of raw materials used to produce agricultural biogas analysis of quarterly reports submitted by agricultural biogas producers,
- 3. issuing a decision prohibiting the producer from conducting business activities in the field of agricultural biogas for a period of 3 years (the decision covers the producer and the installation from January 1, 2020), in the case of:
  - submitting declarations of no arrears in the payment of taxes, fees and social security contributions and the truthfulness of the data contained in the application and the fulfillment of the conditions referred to in Art. 25 points 1 and 2,
  - the manufacturer using false documents in the scope of his business activity regarding agricultural biogas,
  - failure by the producer to remove violations of the conditions regarding possession of documentation regarding the legal title to buildings in which economic activity in the field of agricultural biogas will be carried out, having appropriate facilities and installations that meet the requirements specified in the provisions on fire protection, sanitary and environmental protection, enabling the performance of business activity in the field of agricultural biogas and submitting quarterly reports to the General Director of KOWR within the statutory deadline,,
  - violation of obligations regarding the use of prohibited raw materials for the production of agricultural biogas and failure to keep documentation regarding business activities specified in Art. 25 points 4 and 5 of the RES Act,
- 4. conducting inspections of agricultural biogas producers, including producers in micro-installations, who have obtained a certificate on the possibility of selling unused electricity issued by the President of the Energy Regulatory Office.



## Definition of agricultural micro biogas plant

- **Micro-installation** installation of a renewable energy source with a total installed electrical power of not more than 50 kW, connected to a power grid with a rated voltage lower than 110 kV or with a combined thermal power of not more than 150 kW, in which the total installed electrical power is not greater than 50 kW.
- Agricultural biogas micro-installation installation of a renewable energy source with an annual agricultural biogas capacity of up to 200,000. m3.

Facilitations for agricultural micro biogas plants:

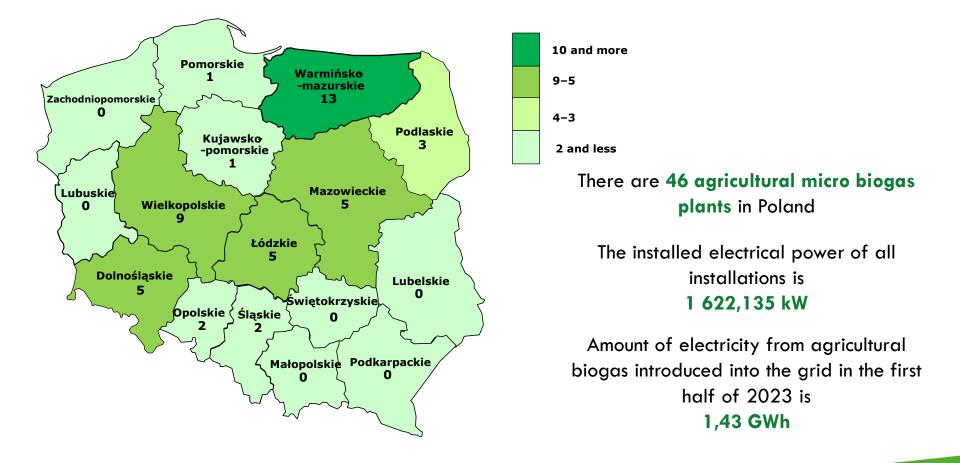
- simplified administrative procedures (no building permit, environmental decision, concession),
- connection to the low voltage network,
- sale of surplus electricity in the FIT tariff.





Micro biogas plants in Poland

#### Geographical distribution of agricultural micro biogas plants as of November 15, 2023





## Micro biogas plants in Poland

#### The number of agricultural micro biogas plants and their total installed electrical capacity



Source: KOWR data. As of June 30, 2023.



A package of solutions regarding renewable energy sources has been created, in particular:

- On October 1, 2023, the provisions of the Act of August 17, 2023 amending the Act on Renewable Energy Sources and certain other acts (Journal of Laws, item 1762) entered into force, which:
  - extended the rules and conditions for conducting business activities in the field of agricultural biogas to include the possibility of producing biomethane from agricultural biogas,
  - extended the subjective scope of the register of agricultural biogas producers to include producers of biomethane from agricultural biogas,
- 2) On September 11, 2023, :the provisions of the Act of July 13, 2023 on facilitating the preparation and implementation of investments in the field of agricultural biogas plants, as well as their operation, entered into force, which
  - accelerate the process of building an agricultural biogas plant,
  - facilitate the issuance of conditions for connecting agricultural biogas plants to the network,
  - introduce exemptions from the obligation to change land use and their exclusion for agricultural biogas plants located on farms with an area of no more than 1 ha,



- introduce a special procedure for locating biogas plants above 1 MW location resolution of the commune council,
- introduce exemptions for specific, safe types of biomass from restrictive waste regulations,
- systematized the use of post-fermentation product as fertilizer.

3) On October 17, 2023, the provisions of the Regulation of the Ministry of Agriculture and Rural Development of October 12, 2023 on a detailed list of substrates that can be used in agricultural biogas plants (Journal of Laws, item 2230) entered into force, which:

- specify a detailed list of substrates that can be used in an agricultural biogas plant that meets the conditions specified in Art. 4 section 1 of the Act of July 13, 2023 on facilitating the preparation and implementation of investments in the field of agricultural biogas plants, as well as their operation, divided into:
  - 1) biomass in the form of animal excrements, straw and other non-hazardous natural substances originating from agricultural or forestry production,
  - 2) other substrates that do not pose a threat to human or animal health or the environment, specifying items or substances that meet the conditions for being recognized as a by-product.



## Activities promoting agricultural biogas plants carried out by KOWR

#### Activities completed:

- 1. Workshops on the use of animal excrements to produce electricity in agricultural micro-biogas plants (8 workshops)
- 2. Workshops on the construction and operation of agricultural biogas plants/biomethane plants and micro-biogas plants (10 workshops)
- 3. Educational films showing the benefits of operating agricultural biogas plants and micro biogas plants (9 films).

#### **Current activities:**

- 1. <u>A series of free workshops on the operation of agricultural biogas plants</u> (12 workshops 6 completed, 6 in progress, upcoming dates:
  - for people interested in building agricultural biogas plants: 24.11; 29:11,
  - for public administration: 23.11.

**Detailed information on workshops is available on the KOWR website.** Information campaign regarding agricultural biogas plants and micro biogas plants in the media, press, internet and social media..

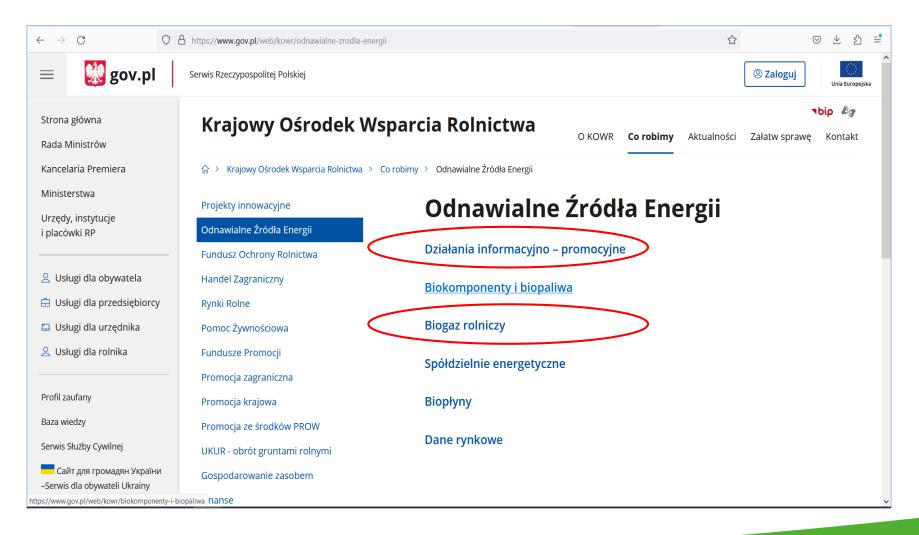
#### **Planned activities:**

 Development of a guide on legal and technological aspects of the construction and operation of agricultural biogas plants and micro biogas plants and installations for the production of biomethane from agricultural biogas.





## Strona internetowa KOWR





# Krajowy Ośrodek Wsparcia Rolnictwa

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infolinia www.kowr.gov.pl